From:

37. A method of making an intervertebral disc prosthesis, the method comprising:

providing a layered annular structure including an annular top plate having a

circumferential outer top edge, an annular bottom plate having a

circumferential outer bottom edge, and a flexible annular central core

having a cylindrical outer wall, the central core being disposed between

the top and bottom plates such that the top and bottom plates define

longitudinal ends of the layered annular structure;

rotating the layered annular structure on a shaft;

winding a fibre around the layered annular structure by extending the fibre sequentially:

- (a) along the top plate from adjacent the shaft to the top edge;
- (b) from the top edge along the cylindrical outer wall to the bottom edge; and
- (c) along the bottom plate from the bottom edge to adjacent the shaft.
- 38. A method according to claim 37, further comprising stretching the fibre prior to or while winding the fibre.
- 39. An intervertebral disc prosthesis comprising:
 - a layered annular structure including an annular top plate having a circumferential outer top edge, an annular bottom plate having a

circumferential outer bottom edge, and a flexible annular central core having a cylindrical outer wall, the central core being disposed between the top and bottom plates such that the top and bottom plates define longitudinal ends of the layered annular structure, wherein a central longitudinal bore is defined through the layered annular structure; and a fibre wound around the layered annular structure, the fibre having multiple portions that extend continuously:

- (a) along the top plate from adjacent the central longitudinal bore to the top edge;
- (b) from the top edge along the cylindrical outer wall to the bottom edge; and
- (c) along the bottom plate from the bottom edge to adjacent the central longitudinal bore.